

REMARKS

Claims 1-13 have been examined. Claims 1-5 and 10 have been rejected under 35 U.S.C. § 102(b), claims 1-2, 4-5 and 10-12 have been rejected under 35 U.S.C. § 102(e), and claims 6, 7 and 9 have been rejected under 35 U.S.C. § 103(a). Also, the Examiner has indicated that claims 8 and 13 contain allowable subject matter.

I. Preliminary Matters

Applicant has amended the specification to correct a minor error. Specifically, on page 21, lines 12-15, the specification states that auxiliary supporting part 134 is provided on surface “131ab” of the sheet discharging guide 131. However, as shown in Figure 15, auxiliary part 134 is actually disposed on surface “131aa”.

Also, Applicant has amended the Abstract so that it better conforms to MPEP § 608.01(b) guidelines.

Claim 6 has been amended to more closely follow the language of claim 1 and claim 10 has been amended to clarify the language set forth. Such amendments to claim 10 merely correct minor errors, are not made in response to prior art rejections, and do not narrow the scope of the claim.

II. Rejection under 35 U.S.C. § 102(b) over JP 11-301880 to Miyasaka et al. (“Miyasaka”) and to JP 11-138769 to Suzuki et al. (“Suzuki”)

Claims 1-5 and 10 have been rejected under 35 U.S.C. § 102(b) as being anticipated by each of the patents to Miyasaka and Suzuki.

A. 35 U.S.C. § 102(b) Rejections of claims 1-3 and 5 in view of Miyasaka

1. Claim 1

The Examiner maintains that Miyasaka discloses the claimed recording apparatus.

However, Applicant submits that claim 1 is not anticipated by Miyasaka. For example, claim 1 relates to a recording apparatus comprising a feeding unit, recording unit, discharging unit, a guide member, a transport path section and a warping part. The guide member forms a sheet transporting surface disposed on a downstream side of the recording unit in a transporting direction of a recording medium. Also, the guide member is inclined with respect to the transport path section and directs the recording medium downward in the transporting direction.

The Examiner maintains that the claimed guide member is shown in Miyasaka, Fig. 1, by the section right after the recording unit 36. However, the section right after the recording unit 36 is formed as a concave recess in recording plane 26. As stated in the English abstract, a sheet passage plane of a sheet passage member 16, for guiding a sheet immediately after recording, is formed lower than a recording plane 26, and the front end of the lower portion 58 is formed higher than or equal to the recording plane 26. Although the concave recess starts to incline on the right side of the recess, after portion 58, this incline does not direct the recording medium downward. Therefore, Miyasaka does not teach or suggest a guide member inclined with respect to a transport path section, while still directing the recording medium downward.

Accordingly, Applicant submits that claim 1 is patentable over the cited reference and respectfully requests the Examiner to withdraw the rejection.

2. Claims 2-3 and 5

Since claims 2-3 and 5 depend on claim 1, Applicant submits that they are patentable at least by virtue of their dependency.

B. 35 U.S.C. § 102(b) Rejections of claims 1-2, 4-5 and 10 in view of Suzuki

1. Claim 1

The Examiner maintains that Suzuki discloses the claimed recording apparatus.

However, Applicant submits that claim 1 is not anticipated by Suzuki. For example, claim 1 recites a recording unit having a warping part for warping a recording medium and a discharge roller provided downstream of a warped portion of the recording medium.

As recited in the Examiner's rejection of claims 1 and 4, the Examiner maintains that rollers 5, 6a and 6b in Figure 2 of Suzuki suggest the claimed discharge roller and the claimed warping part. However, as recited in claim 1, the discharge roller is provided downstream of a warped portion of the recording medium. Even if assuming *arguendo*, that the bent part disposed at rollers 5, 6a and 6b of Suzuki is the warping part, the reference still does not anticipate claim 1. Specifically, recording medium P of Suzuki does not get warped until it reaches rollers 5, 6a and 6b, as shown in Figure 2. Therefore, if rollers 5, 6a and 6b are the discharge roller, they are not disposed downstream from a warped portion of the recording medium P. Rather, they are disposed at the warped portion of the recording medium P. Therefore, since rollers 5, 6a and 6b are not disposed downstream from a warped portion of recording medium P, Suzuki does not teach or suggest the recording apparatus recited in claim 1.

Accordingly, Applicant submits that claim 1 is patentable over the cited reference and respectfully requests the Examiner to withdraw the rejection.

2. Claims 2, 4-5 and 10

Since claims 2, 4-5 and 10 depend either directly or indirectly on claim 1, Applicant submits that they are patentable at least by virtue of their dependency.

III. Rejection under 35 U.S.C. § 102(e) over USP 6,293,670 to Taniguro et al.

(“Taniguro”)

Claims 1-2, 4-5 and 10-12 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Taniguro.

A. Claim 1

The Examiner maintains that Taniguro discloses the claimed recording apparatus. However, Applicant submits that claim 1 is not anticipated by Taniguro. For example, claim 1 relates to a recording apparatus comprising a feeding unit, recording unit, discharging unit, a guide member, a transport path section and a warping part. The guide member forms a sheet transporting surface disposed on a downstream side of the recording unit in a transporting direction of a recording medium. Also, the guide member is inclined with respect to the transport path section and directs the recording medium downward in the transporting direction.

The Examiner maintains that the claimed guide member is shown by platen 34 in Fig. 1. However, the portion of platen 34 to the left of position P₂ is declined in a sheet transporting direction, not inclined in a transporting direction, as the guide member recited in claim 1.

Similarly, as shown in Fig. 8A, the portion of platen 34 to the left of bent portion 34a is declined in a sheet transporting direction, not inclined in a transporting direction.

Accordingly, Applicant submits that claim 1 is patentable over the cited reference and respectfully requests the Examiner to withdraw the rejection.

B. Claims 2, 4-5 and 10-12

Since claims 2, 4-5 and 10-12 depend, either directly or indirectly on claim 1, Applicant submits that they are patentable at least by virtue of their dependency.

IV. Rejection under 35 U.S.C. § 103(a) over JP 11-30180 to Miyasaka et al.

(“Miyasaka”) in view of JP 11-268857 to Yamada et al. (“Yamada”)

Claims 6, 7 and 9 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Miyasaka in view of Yamada.

A. Claim 6

The Examiner acknowledges that Miyasaka fails to teach supporting parts supporting both side edges of the recording medium warped by the warping part, but maintains that Yamada does. However, claim 6 contains similar limitations as recited in claim 1. Since Yamada fails to cure the deficiencies of Miyasaka, which were discussed above, Applicant submits that claim 6 is not rendered obvious over the combination of both references and respectfully requests the Examiner to withdraw the rejection.

Amendment under 37 C.F.R. § 1.111
U.S. Application 10/028,995

B. Claims 7 and 9

Since claims 7 and 9 depend from claim 6, Applicant submits that they are patentable at least by virtue of their dependency.

V. Newly added claims

Applicant has added new claims 14-19 to more fully define the present invention.

VI. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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PATENT TRADEMARK OFFICE

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APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The specification is changed as follows:

Page 21, the second paragraph is amended as follows:

As shown in Figs. 15 through 18, an auxiliary supporting part 134, bar-shaped, for supporting a mid position of the rolled sheet R is provided on the descending sheet transporting surface [131ab]131aa of the sheet discharging guide 131 of the ink jet printer 100'. With such the arrangement of the auxiliary supporting part 134, even when the rolled sheet R having a large rigidity is used and is not concavely curved between the supporting parts 133, the rolled sheet R may be convexly curved by the auxiliary supporting part 134 as shown in Figs. 21A and 21B. As a result, the rolled sheet may be concavely curved between the auxiliary supporting part 134 and the supporting parts 133. Accordingly, even the rigidity of the rolled sheet R is large, there is no chance that the rolled sheet R rises in the vicinity of the incomplete printing portion of the rolled sheet.

IN THE CLAIMS:

The claims are amended as follows:

1. (Once Amended) A recording apparatus comprising:
a feeding unit for storing and feeding a recording medium;
a recording unit for recording information on said recording medium being fed from said feeding unit;

a discharging unit discharging said recording medium transported through said recording unit;

a guide member forming a sheet transporting surface disposed on a downstream side of said recording unit in a transporting direction of said recording medium [and said guide member being inclined to the gravity direction];

a transport path section which transports said recording medium in said transporting direction and which is disposed between said guide member and said recording unit;

a warping part formed on at least one of said guide member and said transport path section for warping said recording medium [formed on said guide member.]; and

a discharge roller provided downstream of a warped portion of said recording medium,
wherein said guide member is inclined with respect to said transport path section,
wherein said guide member directs said recording medium downward as said recording medium is transported in said transporting direction.

6. (Once Amended) A recording apparatus comprising:

a feeding unit for storing and feeding recording medium;

a recording unit for recording information on said recording medium fed from said feeding unit;

a discharging unit for discharging outside said recording medium transported through said recording unit;

a guide member forming a sheet transporting surface disposed on a downstream side of said recording unit in a transporting direction of said recording medium;

a transport path section which transports said recording medium in said transporting direction and which is disposed between said guide member and said recording unit; and

a warping part formed on said guide member for warping said recording medium [formed on said guide member]; and

supporting parts formed on said guide member, said supporting parts supporting both side edges of said recording medium warped by said warping part[.],

wherein said guide member is inclined with respect to said transport path section, and

wherein said guide member directs said recording medium downward as said recording medium is transported in said transporting direction.

10. (Once Amended) A recording apparatus according to claim 5, wherein said inclined[, a] recording medium transporting surface of said warping part is formed by bending a plate like member in a direction orthogonal to said medium transporting direction.

Claims 14-19 have been added as new claims.

Amendment under 37 C.F.R. § 1.111
U.S. Application 10/028,995

IN THE ABSTRACT OF DISCLOSURE:

The abstract is changed as follows:

A recording apparatus has a feeding unit [(110)] for storing and feeding a recording medium, a recording unit [(120)] for recording information on the recording medium having been fed from the feeding unit, and a discharging unit [(130)] for discharging outside the recording medium having been transported through the recording unit. In the recording apparatus, a warping part [(131a)] for warping the recording medium and supporting parts [(133)] for supporting both side edges of the recording medium warped by the warping part are formed on a guide member disposed downstream of the recording unit.